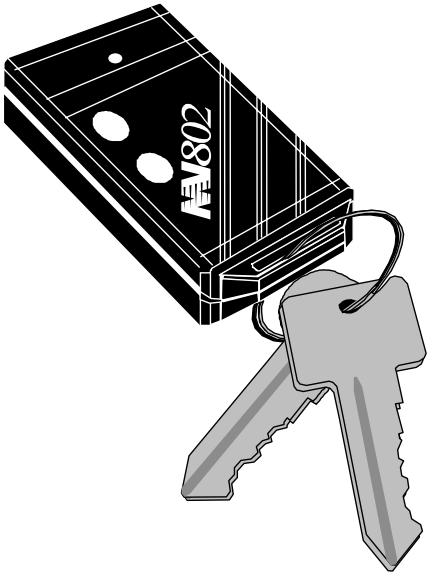
REMOTE CONTROL ENGINE STARTER

Astroflex

USER'S MANUAL

MV801
MV802



Designed for automatic transmission, gasoline fuel-injected vehicles.

CONSULT SAFETY PRECAUTION SECTION BEFORE USING THIS PRODUCT.

NEVER INSTALL THIS PRODUCT ON A MANUAL TRANSMISSION VEHICLE.

PATENT NOS
USA 4.345.554 - CDN 1.130.426
AND OTHER PATENTS PENDING

Manufactured in Canada by : Astroflex

Litho'd in Canada
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INTRODUCTION

Thank you for choosing the AstroFlex Remote Control Engine Starter. Your remote starter is the result of extensive research by a company specializing in the design of high quality electronic equipment for automotive vehicles. Your remote starter is designed to provide years of reliable, trouble-free service. Its advanced microprocessor circuitry incorporates billions of possible access codes to prevent interaction with other remote controlled vehicles. Your remote starter's safe and convenient features will assuredly make your life easier.

Please take the necessary time to read these instructions carefully. Some features may not be installed or applicable to your vehicle.

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SAFETY PRECAUTIONS

Before using this product, carefully read the following safety procedures.

- Immediately report any malfunction to the AstroFlex dealer that performed installation.
- Under no circumstance can this product or its use be modified.
- Always turn main switch off when vehicle is parked in an enclosed, unventilated area or is in for servicing.
- Always turn main switch off if you know you will not be using your Remote Starter for an extended period of time.
- Keep remote controls away from children.
- Have your engine tuned-up on a regular basis to ensure optimum performance of your Remote Starter.
- Always turn your windshield wipers off before leaving vehicle.
- Check safety features regularly; they prevent your Remote Starter from starting the engine under certain conditions. (See "SAFETY CHECKS" on page 6.)
- Make sure you comply with all local regulations which may prohibit leaving your engine running when vehicle is unattended in a public place.
- Always advise service personnel that your vehicle is equipped with a Remote Starter.
- Have your Remote Starter checked annually. Contact the dealer in your area.

BEFORE USING YOUR REMOTE STARTER

Before leaving your vehicle, set the various controls in order to use your Remote Starter.

- Set heating/air-conditioning controls to desired position. (When the MV802 starts your engine, it will also turn on your climate control system.)

Make sure:

- windshield wipers are "**OFF**" ;
- transmission is in "**PARK**" position.

REMOTE CONTROL

Your remote control works off a small, long-life 12-volt alkaline battery (GP-23A). The range of your remote control can be affected by a weak battery, interference from nearby metal structures, hydro poles, or crowded parking lots.

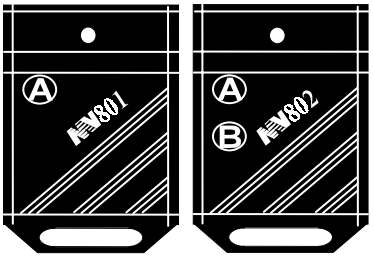
With its electronic CODE LEARNING feature, up to three additional remote controls can be programmed for your vehicle. See your dealer for replacement batteries or additional remote controls.

USING YOUR REMOTE CONTROL

To ensure that commands are transmitted properly, press desired button for 2 seconds. Indicator light will flash momentarily while transmitting the command.

A command will not be transmitted properly if you do not hold the button down long enough (i.e., until indicator light goes out by itself).

Example: To start, press button "A" until indicator light goes out.



CONFIRMING COMMANDS

Your system will acknowledge correct reception of a command by flashing parking lights . In this manual, confirmation signals are written in an abbreviated form; for example:

(lights: 2) Means that parking lights will flash twice.

MV801 • MV802 COMMANDS

COMMAND	BUTTONS	ACKNOWLEDGE
Start/stop	A	Lights, 1
Lock /Unlock	B	Lights, 1 / 2
Sentinel	A&B	Lights, 4 / 2 / 3

START COMMANDS

START /STOP

The Start-Stop command is in fact the reason for being of your remote starter. It allows you to start or stop your vehicle without stepping outdoors.

- Press the “A” button once

UPON STARTING

The parking lights will flash once to confirm the reception of the command, then will stay ON as long as the engine will be running under remote control (10 or 20 minutes according to programming).

IF ENGINE FAILS TO START

If your system cannot start your engine at first attempt, it will wait for a few seconds and then try again (it could try again twice depending on reason for failure to start), after which it will shut down automatically and wait for new command.

UPON STOPPING

The engine and parking lights will turn off.

The command is only applicable when engine is running under remote control.

UPON ENTERING YOUR VEHICLE...

- Do not apply the brakes upon entering your vehicle (which would stop the engine).
- Place the key in the ignition switch and turn it to the “**RUN**” position.

DO NOT TURN THE KEY TO THE “START” POSITION

- Drive as usual.

CONTINUOUS MODE

The Continuous mode consist in sending a "start" command while the engine is already running under key control.

It leaves the engine running after withdrawing the key from the ignition. This convenient feature allows you to leave the vehicle for short periods of time while the climate controls and engine remain on.

Press the "A" button once while the engine is running, do not depress the brake pedal.

Parking lights, engine and preset accessories will remain on for the duration of the programmed runtime (10 or 20 minutes).

Remove key, exit vehicle and lock doors. Steering column will be locked and all safety devices will remain active. If you return to your vehicle before runtime has elapsed, just turn the key to the "ON" position then drive as usual.

WHAT STOPS THE ENGINE

For your safety, the engine will stop and/or will not start under the following conditions.

- The transmitter sends the STOP command
- The hood is opened
- The brake pedal is depressed
- The transmission is shifted out of PARK/NEUTRAL
- The engine over-rev's
- The main switch is OFF
- The engine revs too slowly during cranking

MAIN SWITCH

Main switch is usually installed under the dashboard. It is a toggle **ON**/**OFF** switch that is used to cancel start functions only.

Other commands remain active.

LOW TEMPERATURE MODE

In Low Temperature mode, also called Sentinel mode, the system can start your engine automatically whenever temperature falls below -15° C (5° F).

Engine will run for the programmed runtime, after which the Sentinel mode will wait 2 ½ hours and then start the engine again if temperature is still below -15° C (5° F).

All conditions that normally stop the engine when it is started by remote control (applying brakes, opening hood, etc.) will have the same effect in this mode.

To activate or deactivate Low Temperature mode,

- Press the "A" and "B" buttons simultaneously

Parking lights will flash four times to confirm the activation, and twice to confirm the deactivation. Parking lights will flash three times to indicate "system not ready" (hood open, main switch in "OFF" position, etc.). Depressing the brake pedal or starting by remote deactivates the Low Temperature mode.

LOCKING AND UNLOCKING THE DOORS

To lock doors	press the "B" button	**Lights, 1**
To unlock doors	press the "B" button	**Lights, 2**

Parking lights will flash (one or two times according to command) to acknowledge command reception.

SAFETY CHECKS

In order to maintain high safety standards, proceed with the following routine checks every month.

HOOD SWITCH

- Start your vehicle with the Remote Starter.
- Open the hood.

The engine should stop as soon as the hood is opened.

If the engine fails to stop, immediately turn the main switch to the "**OFF**" position and leave it "**OFF**" until the situation is corrected; contact your local service center.

DETECTING "P" or "N" GEARSHIFT POSITION

Your starter is designed to monitor the gearshift position at all times.

If your vehicle is designed in such a way that the key needs to be in the ignition in order to release the gearshift from the "PARK" position, your vehicle is safe as long as the keys are kept away from children.

If the gearshift can be put into gear without the key in the ignition, proceed with the following minor routine checks.

- Place the gearshift lever into gear.
- Be ready to apply brakes.
- Start your vehicle with the Remote Starter.
- Repeat these steps in "**Drive**" and "**Reverse**".

If the starter engages within ten (10) seconds of sending the Start command, **immediately** turn the main switch to the "**OFF**" position and leave it "**OFF**" until the situation is corrected; contact your local service center.

REPLACING OR BOOSTING THE VEHICLE BATTERY

If you have to replace or boost the battery for any reason, first turn the main switch "**OFF**" and leave it "**OFF**" until the battery is replaced or fully charged.

Reversing polarity during this operation could permanently damage your Remote Starter.

WARRANTY

1) ASTROFLEX warrants the manufactured product against any defect in workmanship or material for the period specified below.

2) This Warranty excludes any other legal warranty, with the exception of the provisions pertaining to public order.

3) This Warranty only applies in favor of the original purchaser; it does not apply to subsequent purchasers.

4) This Warranty is valid for the life of the vehicle on which the product was originally installed, as long as it remains installed on the said vehicle, with the exception of those components covered by a shorter warranty.

5) If the conditions mentioned in paragraphs 3) and 4) are met, the Warranty applies solely to the control module of the remote starter.

6) All other accessories and tools (such as the transmitter, switch, antenna, DL-3 or DL-4 module, MultiTest tool, etc.) are warranted for a period of one year from the date of the purchase contract; the batteries are not covered by any warranty.

7) ASTROFLEX shall repair or replace any part of the product or the product itself, either (a) in accordance with the provisions in paragraph 5), free of charge during the first two years of the contract, or (b) in accordance with the provisions in paragraph 6), free of charge during the first year of the contract.

8) After two years from the date of the contract, ASTROFLEX will repair the product, if possible, at the rates and conditions then applicable. The product will be returned, freight collect, to the purchaser.

9) If the purchaser cannot provide proof of purchase, the Warranty is limited to two years from the manufacturing date as confirmed by the product's serial number. The purchaser of this ASTROFLEX product shall return the product for warranty service, freight prepaid, to the appropriate address indicated at the end of this document.

10) This Warranty only applies to the product itself and does not apply to any material damages other than to the product itself.

11) ASTROFLEX does not warranty either the product itself or any damages that may be caused by the product if any of the following conditions apply:

   a) the installation was not done by the installer-distributor, and in accordance with the instructions from ASTROFLEX;

   b) the product was damaged after installation;

   c) the purchaser used the product in an abusive manner or for a purpose other than stipulated in the user's guide;

   d) the purchaser repaired the product himself or had the product repaired by someone not authorized by ASTROFLEX;

   e) the product was repaired with parts not authorized by ASTROFLEX.

12) ASTROFLEX is not responsible for removal or reinstallation charges.

13) This Warranty constitutes the only warranty from ASTROFLEX in regard to the original purchaser; any other warranty is specifically excluded, including legal warranties, with the exception of provisions pertaining to public order.

Note: Operation, specifications and design of our products are subject to change without notice.

NOTICE

This device complies with the requirements of Industry Canada (IC) - Management of Radiofrequencies, as specified in document RSS-210. Its use is authorized only on a no-interference, no-protection basis; in other words, this device must not be used if it is determined that it causes harmful interference to services authorized by IC. In addition, the user of this device must accept any radio interference that may be received, even if this interference could affect the operation of the device.

IC APPROVAL No.: 1854 K 1066

This device complies with Part 15 of the FCC rules.

Operation is subject to the following two conditions:

(1) this device may not cause harmful interference and

(2) this device must accept interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television, which can be determined by turning the equipment OFF and ON, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio / TV technician for help

FCC APPROVAL No. J5FRS-3R

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